



Introduction to Cisco UCS Central

- [Introducing Cisco UCS Central, page 1](#)

Introducing Cisco UCS Central

Cisco UCS Central provides scalable management solution for growing Cisco UCS environment. Cisco UCS Central simplifies the management of multiple Cisco UCS domains from a single management point through standardization, global policies and global ID pools. Cisco UCS Central does not replace Cisco UCS Manager, which is the policy driven management for single UCS domain. Instead Cisco UCS Central focuses on managing and monitoring the UCS domains on a global level, across multiple individual Cisco UCS Classic and Mini management domains worldwide.

Cisco UCS Central enables you to manage individual or groups of classic, mini or mixed Cisco UCS domains with the following:

- Centralized Inventory of all Cisco UCS components for a definitive view of the entire infrastructure and simplified integration with current Information Technology Infrastructure Library (ITIL) processes.
- Centralized, policy-based firmware upgrades that can be applied globally or selectively through automated schedules or as business workloads demand
- Global ID pooling to eliminate identifier conflicts
- Global administrative policies that enable both global and local management of the Cisco UCS domains
- An XML API, building on the Cisco UCS Manager XML API for easy integration into higher-level data center management frameworks
- Remote management to manage various end points in registered Cisco UCS domains

Cisco UCS Central does not reduce or change any local management capabilities of Cisco UCS Manager, such as its API. This allows you to continue using Cisco UCS Manager the same way as when you did not have Cisco UCS Central, and also allows all existing third party integrations to continue to operate without change.

Cisco UCS Central Features

The following table provides a list of features with brief description on the management capabilities of Cisco UCS Central:


Note

For a full list of new features, see the [Release Notes for Cisco UCS Central](#).

Feature	Description
Centralized inventory	Cisco UCS Central automatically aggregates a global inventory of all registered Cisco UCS components, organized by domain, with customizable refresh schedules and provides even easier integration with ITIL processes, with direct access to the inventory through an XML interface.
Centralized fault summary	Cisco UCS Central enables you to view the status of all Cisco UCS infrastructure on the global fault summary panel, with a fault summary organized by domain and fault type. Also provides you the ability to view individual Cisco UCS Manager domains for greater fault detail and more rapid problem resolution. Drilling down on a fault launches the UCS Manager in context for a seamlessly integrated experience.
Centralized, policy-based firmware upgrades	You can download firmware updates automatically from the Cisco.com to a firmware library within Cisco UCS Central. Then schedule automated firmware updates, globally or selectively, based on your business requirements. Managing firmware centrally ensures compliance with IT standards and makes reprovisioning of resources a point-and-click operation.
Global ID pools	Cisco UCS Central eliminates identifier conflicts and ensures portability of software licenses. You are able to centralize the sourcing of all IDs, such as universal user IDs (UUIDs), MAC addresses, IP addresses, and worldwide names (WWNs), from global pools and gain real-time ID use summaries. Centralizing server identifier information makes it simple to move a server identifier between Cisco UCS domains anywhere in the world and reboot an existing workload to run on the new server.
Domain groups	Cisco UCS Central simplifies policy management by providing options to create domain groups and subgroups. A domain group is an arbitrary grouping of Cisco UCS domains that can be used to group systems into geographical or organizational groups. Each domain group can have up to five levels of domain sub groups. This provides you the ability to manage policy exceptions when administering large numbers of Cisco UCS domains. Each sub group has a hierarchical relationship with the parent domain group.

Feature	Description
Global administrative policies	Cisco UCS Central helps you to ensure compliance and staff efficiency with global administrative policies. The global policies are defined at the domain group level and can manage anything in the infrastructure, from date and time and user authentication to equipment power and system event log (SEL) policies.
Global service profiles and templates	Global service profiles and templates in Cisco UCS Central enables fast and simplified infrastructure deployment and provides consistency of configurations throughout the enterprise. This feature enables global bare-metal workload mobility very similar to how hypervisor enables virtualized workload mobility.
Backup	Cisco UCS Central provides an automatic backup facility that enables quick and efficient backing up the configuration information of the registered Cisco UCS domains and the UCS Central configuration.
High availability	As with all Cisco UCS solutions, Cisco UCS Central is designed for no single point of failure. High availability for Cisco UCS Central Software allows organizations to run Cisco UCS Central using an active-standby model with a heartbeat that automatically fails over if the active Cisco UCS Central does not respond.
XML API	Cisco UCS Central, just like Cisco UCS Manager, has a high-level industry-standard XML API for interfacing with existing management frameworks and orchestration tools. The XML API for Cisco UCS Central Software is similar to the XML API for Cisco UCS Manager, making integration with high-level managers very fast.
Remote Management	Cisco UCS Central enables you to manage various end points in the registered Cisco UCS domains from one management point. You can manage chassis, servers, fabric interconnects, and fabric extenders from Cisco UCS Central GUI or CLI. You can also access tech support files for registered UCS domains from Cisco UCS Central.

Overview of Cisco UCS Central 1.4 Features

Cisco UCS Central, release 1.4 allows you to take charge of the data center environment by delivering easy to use, integrated solution for managing Cisco UCS Domains from a single management point, both in data centers and remote management locations, with high availability. With Cisco UCS Central 1.4, you can efficiently manage server, storage and network policies and generate network traffic reports for your entire data center.

This release includes full support for the HTML5-based user interface, which is now the default user interface. The previous flash-based user interface is available at http://UCSCentral_IP/flex.html.

The following table lists the new features in the HTML 5 user interface:

Feature	Functions
Advanced Local Storage Configuration	<ul style="list-style-type: none"> • Configuration of Storage Profiles and multiple virtual drives—To allow flexibility in defining the number of storage disks, roles and usage of these disks, and other storage parameters, you can create and use storage profiles. A storage profile encapsulates the storage requirements for one or more service profiles. You can also configure multiple virtual drives. • Configuration of a local LUN or a JBOD as the primary boot device • Support for local storage configuration on multiple storage controllers • Support for out-of-band configuration for local storage
Port Configuration and Disjoint Layer-2 Network	Enables configuration support for ports and port channels, including scalability ports. Also allows upstream disjoint L2 configuration.
Equipment Policies	Global support for chassis discovery policy, rack discovery policy, rack management connection policy, and other equipment-related policies.
Global Service Profile enhancements	<ul style="list-style-type: none"> • Manual creation of vNICs and vHBAs inside service profiles. • Naming conventions when creating service profiles from templates. • Service profile qualification policy
Adapter Policy enhancements	RoCE, NVGRE, ARFS, and VxLAN added to adaptor policies.
New connection policies	<ul style="list-style-type: none"> • VMQ connection policy • usNIC connection policy
PVLAN	Configuration support for private VLANs.
Advanced Host Firmware Pack	Component exclusion support in host firmware package policy.

Feature	Functions
Maintenance Policy enhancements	Can now schedule maintenance policies to automatically apply changes at the next reboot.
Smart Call Home	Enables support for Smart Call Home on Cisco UCS Central.
Support for traditional licence management and Smart Licensing	Enables support for the new Smart licensing, as well as continuing support for traditional license management.
Remote Authentication enhancements	Added support for TACACs and RADIUS.
BIOS token support	Includes support for all BIOS tokens included in Cisco UCS Manager, including Consistent Device Naming (CDN).
SNMP Support	Support for sending Cisco UCS Central alerts via SNMP to other management tools.
Cisco UCS Manager 3.1	Pre-enabled support for Cisco UCS Manager release 3.1 and associated hardware platforms.
Boot Policy enhancements	Enables support for booting from multiple LUNs, embedded LUNs and embedded JBOD.
API Communications Report	Enables reporting on active API communications between the GUI and back-end.
Tomcat Logging	Enables logging for Tomcat processes.
Improved VLAN permission management	Allows different organizations to have permissions to different VLANs.
Multi-delete usage analysis	Allows you to see the effect of deleting multiple policies, such as what service profiles use them.
General UI enhancements	<ul style="list-style-type: none"> • Export, saved searches • Domain group and organization view UI enhancements • Enhanced widgets and additional widgets added • Hardware components table view that displays all hardware components within the system, such as FANs, PSUs, and Memory.
Configuration Status	Can view configuration status for Ports, Service Profiles, and Firmware Upgrade scheduling.

Feature	Functions
Security enhancements	<ul style="list-style-type: none">• Added multiple security enhancements as well as updates to the underlying operating system.• Unified KVM launch with KVM-only permissions
Direct-attached Storage (DAS)	Enables connecting a storage array directly to the FI.